# Notes and Descriptions of North American Plants.—II

By John K. Small

## I. NOTEWORTHY SPECIES

Habenaria Garberi Porter, Bot. Gaz. **5**: 135. 1880

The original and second known stations for this interesting orchid are both near Manatee, Florida. A second locality can now be placed on record; this is Orange County, Florida, where Mr. F. L. Lewton discovered the species at several stations in the summer of 1894. His specimens are essentially the same as the type.

Habenaria macroceratitis Willd. Sp. Pl. **4**: 44. 1805

This remarkable tropical *Habenaria* has been found native in Florida, by Mr. Lewton. It is not rare in Sumter County, where he first met with it in 1894.

Thermopsis mollis (Michx.) M. A. Curtis, Mem. Am. Acad. II. **3**: 47. *pl.* 9. 1848

Heretofore this comparatively rare species has been reported as growing in the mountains of Virginia and North Carolina. But its range is wider than this; in May, 1869, Mr. Canby collected it on Lookout Mountain, Tennessee, and on May 21, 1890, Professor Scribner rediscovered it at the same locality.

Pluchea imbricata (Kearney) Nash, Bull. Torr. Club, **23**: 108. 1896

Excellent specimens of this *Pluchea* were collected in swamps about Forest City, Orange County, Florida, by Mr. F. L. Lewton in July, 1893. The specimens of this collection agree almost perfectly with the type.

Hieracium Scribneri Small, Bull. Torr. Club, **21**: 20. 1894

Professor Ruth has sent me almost typical specimens of this rare member of *Hieracium* from near Knoxville, Tennessee, where he collected the plant in 1897.

SENECIO MILLIFOLIUM T. & G. Fl. N. A. **2**: 444. 1843

In 1887 Mr. E. R. Memminger rediscovered this rare *Senecio* in Henderson County, North Carolina, where it was collected many years ago by Buckley. In 1895 Mr. A. M. Huger sent me specimens from Macon and Jackson counties, North Carolina, where he found it growing plentifully on sloping cliffs at altitudes ranging from 1100–1400 meters.

## II. HITHERTO UNDESCRIBED SPECIES

### Allium arenicola

Bulbs nearly 1 cm. long, with fibrous outer coats. Leaves basal; blades very narrowly linear, becoming almost filiform, about as long as the scape or shorter: scapes erect, sometimes several together, 1–3 dm. tall, more or less curved: umbels erect, 10–30-flowered: pedicels 5–10 mm. long, slender: perianth deep pink; segments linear to narrowly linear-lanceolate, about 4 mm. long, very delicate: filaments dilated below: capsules not crested.

In sandy soil, Mississippi. Spring.

This species has been confused with *Allium mutabile* Michx. for nearly three quarters of a century. It is much more slender in habit and smaller in all its parts. The type specimens were collected by Martha B. Flint at Brookhaven, Mississippi, April 1, 1888.

### Ranunculus cuneiformis

Foliage hirsute below the inflorescence. Roots thickened, clustered: stems usually several together, 2–3 dm. tall, erect or ascending, rather slender: leaves mainly basal; blades, at least some of them, twice-divided into cuneate rather obtuse segments, 5–10 cm. long, about as long as the petioles; upper stem leaves with blades 3-parted; segments narrow, often incised: flowers yellow, about 1.5 cm. broad, on strigillose peduncles: heads of fruit subglobose or ovoid-globose, about 1 cm. long: receptacle barely elongated: achenes 4 mm. long, conspicuously winged and with a triangular beak.

On prairies, near Kerrville, Texas. Spring. *Heller*, Pl. S. Tex. no. 1688. It differs from its relative as shown below:

RANUNCULUS CUNEIFORMIS

Blades of lower leaves twice-divided: corollas 1.5 cm. broad: heads of achenes subglobose or ovoid-globose, receptacle barely elongated: achenes conspicuously winged, with triangular beaks.

RANUNCULUS MACRANTHUS

Blades of lower leaves once-divided: corollas 3–5 cm. broad: heads of achenes oblong to cylindric: receptacle elongated: achenes narrowly margined, with subulate slightly curved beaks.

### Ranunculus Mississippiensis

Perennial, stoloniferous, fleshy. Stems stout, about 2 dm. tall, more or less branched: leaves various; basal or those on the lower part of the stem with ovate or ovate-lanceolate sinuate-dentate blades 1.5–4 cm. long, and elongated petioles, upper leaves with oblong or linear remotely-toothed blades 3–8 cm. long: flowers few: sepals oblong to suborbicular, sparingly pubescent: corollas about 1.5 cm. broad; petals about 9, nearly oblong, deep yellow and lustrous within.

In low grounds, Arkansas and Mississippi. Spring.

ARKANSAS: Varner, Lincoln Co., April 28, 1898; *Bush*, no. 12.

MISSISSIPPI: "Alluvions." 1840; *Peck*.

Related to *Ranunculus oblongifolius*, but more robust, with truncate or cordate blades terminating the elongated petioles of the lower or basal leaves and much larger corollas consisting of about nine petals.

### Thalictrum mirabile

Perennial, slender, glabrous, bright green. Stems erect, 1–3 dm. tall, wiry, dichotomously branched above: leaves various, basal usually ternately compound, with petioles about 2 cm. long; upper leaves gradually more simple and shorter petioled: leaflets suborbicular or orbicular-reniform, 2–3 cm. broad, very thin, delicately nerved, glaucescent beneath, broadly crenate or shallowly crenate-lobed, truncate or subcordate at the base, longer than the petiolules: peduncles hair-like: flowers white: sepals spatulate or rhombic-spatulate, fully 1.5 mm. long: filaments fully 2 mm. long, club-shaped by an abrupt thickening about the middle: fruit spreading at right-angles to the peduncle; body plump, about 2 mm. long, acute, not depressed along the upper side, as long as the filiform stalk or shorter.

Resembles *Thalictrum clavatum* but more delicate and smaller throughout, and with very short-petioled basal leaves. The fruit

is only about one-half the size of that of *T. clavatum* and has a plump barely ribbed body not at all depressed along the upper side.

The original specimens were collected by Prof. F. S. Earle under sandstone bluffs on Little Mountain near Moulton, Alabama, June 25, 1899, no. 2212.

### Phyllanthus Avicularia

Perennial, bright green. Stems branched at the base and throughout, 3–6 dm. long, puberulent, striate in age: leaves numerous, ascending: blades oblong, or slightly broadest above the middle, 8–18 mm. long, blunt or barely pointed, slightly paler beneath than above, rounded or truncate at the base: petioles 1 mm. long, or shorter: calices short-pedicelled; staminate delicate, barely 2 mm. broad, sepals orbicular-obovate or suborbicular: pistillate firmer, fully 2 mm. broad or barely 3 mm. broad at maturity; sepals oblong or oval, scarious-margined, persistent: capsules spheroidal, 3 mm. broad.

In dry soil, along the Brazos River, Texas. Type from Columbia, Texas, collected by B. F. Bush, October 26, 1899, no. 263.

Related to *Phyllanthus polygonoides*, but much more robust in all its parts. The leaves, too, are of an oblong type. The capsules conspicuously surpass the mature pistillate calyx, whereas those of *P. polygonoides* are at least equaled by the mature sepals.

### OEnothera nyctaginiifolia

Apparently annual or biennial, sparingly pubescent. Stems branched at the base, branches spreading or decumbent, 2–5 dm. long, more or less branched: leaves rather few; blades lanceolate to ovate-lanceolate, 2–5.5 cm. long, acute or slightly acuminate, often somewhat crisped and twisted, undulate, ciliate, cuneate or truncate at the base; petioles 2–6 mm. long, pale, margined: flowers axillary: hypanthium bristly and with very slender hairs, especially about the ovary; tubular portion about as long as the ovary: sepals linear-lanceolate, fully 1.5 cm. long, thin and delicate: capsules 4–5 cm. long, club-shaped by the sterile basal portion which is slightly shorter than the fertile portion, about 4 mm. thick: seeds 1.5 mm. long, reticulated.

In dry soil, Flagstaff, Arizona, September 5, 1894, *J. W. Toumey.*

More closely related to *OEnothera laciniata* than any other species. It differs in the larger flowers and the club-shaped capsules, besides the conspicuous character of the leaves. These members are very suggestive of the leaves of *Nyctaginea* or the broad-leaved species of *Allionia.*

## Phlox Brittonii

Perennial, deep green. Stems copiously branched; branched matted, forming wide tufts, glandular-pilose: leaves numerous, small ones often clustered in the axils of the larger; blades subulate or narrowly linear-subulate, 5–10 mm. long, ciliate, especially near the base: calices 5–6 mm. long, glandular-pubescent like the branches; segments subulate, about as long as the tube: corolla white: tube curved, about 1 cm. long; limb 12–13 mm. wide; segments cuneate, with 2 pale magenta spots near the base, cleft by a V-shaped sinus about 3 mm. deep, usually with a minute tooth in each sinus, tips acute or acutish.

On dry mountain slopes, Virginia and West Virginia to North Carolina. Spring and Summer.

A relative of *Phlox subulata* but more delicate in all its parts. The contrasting characters may be shown as follows:

| PHLOX BRITTONII | PHLOX SUBULATA |
|---|---|
| Stems or branches glandular-pilose: leaf blades mostly 5–10 mm. long: calices 5–6 mm. long: limb of corolla less than 14 mm. broad; lobes usually with a minute tooth in each sinus. | Stems or branches not glandular: leaf-blades mostly 10–15 mm. long: calices 8–9 mm. long: limb of corolla over 15 mm. broad; lobes usually with toothless sinuses. |

The specimens upon which the species is based were collected by Dr. N. L. Britton, at White Sulphur Springs, West Virginia, May, 1898. Dr. Britton then introduced the species in the herbaceous grounds of the New York Botanical Garden where the plants have become thoroughly established.

## Vernonia interior

Perennial, finely and usually closely pubescent. Stems erect or ascending, 1–2 meters tall, simple below the inflorescence: leaves numerous; blades elliptic to elliptic-lanceolate, 6–20 cm. long, acuminate, sharply and rather finely serrate, sessile or nearly so: heads numerous, rather crowded: involucres campanulate, 6–7 mm. high, 4–5 mm. broad: bracts pubescent, sometimes hoary, acute or with short keel-like acuminations, the tips erect or slightly spreading: achenes pubescent: pappus purple.

On plains or prairies, Missouri and Kansas south to Texas. Spring to fall.

The species just described has heretofore been confused with *Vernonia Baldwinii* and *V. Drummondii*. It is readily separable from its nearest relative, *Vernonia Baldwinii* by the smaller involucres and their bracts which have erect or barely spreading tips. The following cited specimens belong here:

MISSOURI: Jackson County, *Bush*, no. 233A; McDonald County, *Bush*, no. 232.

NEBRASKA: Lincoln, *Webber*, September, 1888.

TEXAS: Kerrville, *Heller*, Pl. S. Tex. no. 1927.

This species has been raised from seed in the nurseries of the New York Botanical Garden and is now established in the herbaceous grounds.

**Vernonia maxima**

Foliage glabrous or sparingly pubescent. Stems erect, 1–3 meters tall, branching above: leaves rather numerous: blades narrowly elliptic to lanceolate or linear-lanceolate, 1–3 dm. long, acuminate, sharply serrate, narrowed into short petioles or the upper ones nearly sessile: corymbs 1–4 dm. broad: peduncles angled, barely enlarged upward: involucres hemispheric, 4 mm. to nearly 5 mm. high, rounded at the base: bracts ovate to oblong, acute to mucronate, ciliate, appressed: achenes 3 mm. long, upwardly barbed on the ribs: pappus light or deep purple.

In low ground, Ohio to Missouri, south to Alabama and Louisiana. Summer and fall.

For many years *Vernonia gigantea* or *V. altissima* has been an aggregate. The campestrian plant that has been known under both of those names is very distinct from the Carolinian and Floridian plant to which both the above cited names were originally applied.

The campestrian plant may easily be separated from the southeastern species by the lower involucres with rounded bases and their proportionately broader appressed and compactly arranged bracts. The involucres of the related species are narrowed at the base and have narrower loosely spreading bracts. The following cited specimens belong here:

MISSOURI: Jackson County, *Bush*, no. 230.

OHIO: no locality, *Riddell*, 1834. Scioto, *Merriam*, September 28, 1891.

WEST VIRGINIA: Monongalia County, *Millspaugh*, no. 677.

KENTUCKY: no locality, *Short*, 1842. Harlan County, *Kearney*, no. 188.

TENNESSEE: Knoxville, *Ruth*, September, 1894.
MISSISSIPPI: Agricultural College, *Pollard*, no. 1267.

### Lacinaria Halei

Perennial, glabrous or nearly so. Stems erect, 6–9 dm. tall, simple or sparingly branched: leaves various; lower with linear blades 1–2 dm. long, upper narrowly linear and much shorter, not ciliate near the base: heads short-peduncled or nearly sessile, not densely crowded: involucres becoming narrowly turbinate, 7–9 mm. high: bracts lanceolate to oblong-lanceolate, acuminate, ciliolate, rigid: pappus plumose: achenes closely pubescent.

On prairies, Louisiana. Summer.

This species has heretofore been included in *Lacinaria acidota*, with which it has little or nothing in common, and it may be separated by its fewer leaves and much smaller heads which are disposed in elongated interrupted spikes. The bracts of the involucre are much shorter than those of *L. acidota* and have less elongated tips.

The species is founded on Hale's no. 334.

### Lacinaria platylepis

Perennial, bright green. Stems erect, 8–9 dm. tall, simple, glabrate below, pubescent with white hairs above: leaves not very numerous, narrowly linear, 2–10 cm. long, or longer at the base of the stem, glabrous or nearly so: heads rather approximate, sessile, surpassing the subtending bracts: involucres cylindric-campanulate, 7–9 mm. long; outer bracts often ovate, acute, inner larger and broader, broadest above the middle, rounded at the apex, ciliolate: pappus not plumose, pale.

In sandy soil, Louisiana.

Plants belonging here have been referred to *Lacinaria acidota*. although none of the several characters warrant such a disposition, The fewer and shorter leaves, the elongated more or less interrupted spikes and smaller heads and involucres with their broad rounded inner bracts, are some of the characters that separate *Lacinaria platylepis* from *L. acidota*. The pappus too is not plumose.

The original specimens were collected in Louisiana by Dr. Hale.